

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).

Reviewer: markspencer

Timestamp: [year=2009; month=4; day=14; hr=7; min=51; sec=51; ms=455;]

=====

Application No: 10552298 Version No: 3.0

Input Set:

Output Set:

Started: 2009-03-24 15:42:52.907
Finished: 2009-03-24 15:42:55.625
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 718 ms
Total Warnings: 57
Total Errors: 0
No. of SeqIDs Defined: 69
Actual SeqID Count: 69

Error code	Error Description
W 402	Undefined organism found in <213> in SEQ ID (9)
W 402	Undefined organism found in <213> in SEQ ID (10)
W 402	Undefined organism found in <213> in SEQ ID (11)
W 402	Undefined organism found in <213> in SEQ ID (12)
W 402	Undefined organism found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
W 213	Artificial or Unknown found in <213> in SEQ ID (22)
W 213	Artificial or Unknown found in <213> in SEQ ID (23)
W 213	Artificial or Unknown found in <213> in SEQ ID (24)
W 213	Artificial or Unknown found in <213> in SEQ ID (25)
W 213	Artificial or Unknown found in <213> in SEQ ID (26)
W 213	Artificial or Unknown found in <213> in SEQ ID (27)
W 213	Artificial or Unknown found in <213> in SEQ ID (28)
W 213	Artificial or Unknown found in <213> in SEQ ID (29)
W 213	Artificial or Unknown found in <213> in SEQ ID (30)
W 213	Artificial or Unknown found in <213> in SEQ ID (31)

Input Set:

Output Set:

Started: 2009-03-24 15:42:52.907
Finished: 2009-03-24 15:42:55.625
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 718 ms
Total Warnings: 57
Total Errors: 0
No. of SeqIDs Defined: 69
Actual SeqID Count: 69

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (32)
W 213	Artificial or Unknown found in <213> in SEQ ID (33)
W 213	Artificial or Unknown found in <213> in SEQ ID (34)
W 213	Artificial or Unknown found in <213> in SEQ ID (35)
W 213	Artificial or Unknown found in <213> in SEQ ID (36)
	This error has occurred more than 20 times, will not be displayed

SEQUENCE LISTING

<110> THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
 GILL, Gordon N.
 YEO, Michele
 LIN, Patrick S.
 DAHMUS, Michael E.

<120> PHOSPHATASE REGULATION OF NUCLEIC ACID TRANSCRIPTION

<130> 00015-041US1

<140> 10552298

<141> 2006-06-12

<150> US 60/459,786

<151> 2003-04-01

<160> 69

<170> PatentIn version 3.5

<210> 1

<211> 783

<212> DNA

<213> Homo sapiens

<400> 1

atggacagct cggccgtcat tactcagatc agcaaggagg aggctcgggg cccgctgcgg	60
ggcaaaggtg accagaagtc agcagcttcc cagaagcccc gaagccgggg catcctccac	120
tcactcttct gctgtgtctg ccgggatgat ggggagggccc tgctgtctca cagcggggcg	180
ccctgcttg tggaggagaa tggcgccatc cctaagacce cagtccaata cctgctccct	240
gaggccaagg ccagagactc agacaagatc tgctgtgtca tcgacctgga cgagaccctg	300
gtgcacagct ccttcaagcc agtgaacaac gcggacttca tcatccctgt ggagattgat	360
ggggtggtcc accaggtcta cgtgttgaag cgtcctcatg tggatgagtt cctgcagcga	420
atgggcgagc tctttgaatg tgtgtgttcc actgctagcc tcgccaagta cgcagacca	480
gtagctgacc tgctggacaa atgggggggcc ttccggggccc ggctgtttcg agagtectgc	540
gtcttccacc gggggaacta cgtgaaggac ctgagccggg tgggtcgaga cctgcggcgg	600
gtgctcatcc tggacaattc acctgectcc tatgtcttcc atccagacaa tgctgtaccg	660
gtggcctcgt ggtttgacaa catgagtgc acagagctcc acgacctcct ccccttcttc	720
gagcaactca gccgtgtgga cgacgtgtac tcagtgtctca ggcagccacg gccagggagc	780
tag	783

<210> 2
<211> 260
<212> PRT
<213> Homo sapiens

<400> 2

Met Asp Ser Ser Ala Val Ile Thr Gln Ile Ser Lys Glu Glu Ala Arg
1 5 10 15

Gly Pro Leu Arg Gly Lys Gly Asp Gln Lys Ser Ala Ala Ser Gln Lys
20 25 30

Pro Arg Ser Arg Gly Ile Leu His Ser Leu Phe Cys Cys Val Cys Arg
35 40 45

Asp Asp Gly Glu Ala Leu Pro Ala His Ser Gly Ala Pro Leu Leu Val
50 55 60

Glu Glu Asn Gly Ala Ile Pro Lys Thr Pro Val Gln Tyr Leu Leu Pro
65 70 75 80

Glu Ala Lys Ala Gln Asp Ser Asp Lys Ile Cys Val Val Ile Asp Leu
85 90 95

Asp Glu Thr Leu Val His Ser Ser Phe Lys Pro Val Asn Asn Ala Asp
100 105 110

Phe Ile Ile Pro Val Glu Ile Asp Gly Val Val His Gln Val Tyr Val
115 120 125

Leu Lys Arg Pro His Val Asp Glu Phe Leu Gln Arg Met Gly Glu Leu
130 135 140

Phe Glu Cys Val Leu Phe Thr Ala Ser Leu Ala Lys Tyr Ala Asp Pro
145 150 155 160

Val Ala Asp Leu Leu Asp Lys Trp Gly Ala Phe Arg Ala Arg Leu Phe
165 170 175

Arg Glu Ser Cys Val Phe His Arg Gly Asn Tyr Val Lys Asp Leu Ser
180 185 190

Arg Leu Gly Arg Asp Leu Arg Arg Val Leu Ile Leu Asp Asn Ser Pro

195

200

205

Ala Ser Tyr Val Phe His Pro Asp Asn Ala Val Pro Val Ala Ser Trp
 210 215 220

Phe Asp Asn Met Ser Asp Thr Glu Leu His Asp Leu Leu Pro Phe Phe
 225 230 235 240

Glu Gln Leu Ser Arg Val Asp Asp Val Tyr Ser Val Leu Arg Gln Pro
 245 250 255

Arg Pro Gly Ser
 260

<210> 3

<211> 852

<212> DNA

<213> Homo sapiens

<400> 3

atggaacacg gctccatcat caccagggcg cggagggaag acgccttggg gctcaccaag 60

caaggcctgg tctccaagtc ctctcctaag aagcctcgtg gacgtaacat cttcaaggcc 120

cttttctgct gttttcgcgc ccagcatgtt ggccagtcaa gttcctccac tgagctcgtc 180

gcgtataagg aggaagcaaa caccattgct aagtcggatc tgctccagtg tctccagtac 240

cagttctacc agatcccagg gacctgacct ctcccagagg tgacagagga agatcaagga 300

aggatctgtg tggtcattga cctcgatgaa acccttgtgc atagctcctt taagccaatc 360

aacaatgctg acttcatagt gcctatagag attgagggga ccactcacca ggtgtatgtg 420

ctcaagaggc cttatgtgga tgagttcctg agacgcatgg gggaactctt tgaatgtgtt 480

ctcttcaactg ccagcctggc caagtatgcc gaccctgtga cagacctgct ggaccggtgt 540

gggggtgttc gggcccgccct attccgtgag tcttgctgtg tccaccaggg ctgctacgtc 600

aaggacctca gccgcctggg gagggacctg agaaagaccc tcatcctgga caactcgcct 660

gcttcttaca tattccaccc cgagaatgca gtgcctgtgc agtcctgggt tgatgacatg 720

gcagacactg agttgctgaa cctgatccca atctttgagg agctgagcgg agcagaggac 780

gtctacacca gccttggggc agctgcgggc cccttagcct gcctgcttc caagcgacgg 840

ccatcccagt ag 852

<210> 4

<211> 283
<212> PRT
<213> Homo sapiens

<400> 4

Met Glu His Gly Ser Ile Ile Thr Gln Ala Arg Arg Glu Asp Ala Leu
1 5 10 15

Val Leu Thr Lys Gln Gly Leu Val Ser Lys Ser Ser Pro Lys Lys Pro
20 25 30

Arg Gly Arg Asn Ile Phe Lys Ala Leu Phe Cys Cys Phe Arg Ala Gln
35 40 45

His Val Gly Gln Ser Ser Ser Ser Thr Glu Leu Ala Ala Tyr Lys Glu
50 55 60

Glu Ala Asn Thr Ile Ala Lys Ser Asp Leu Leu Gln Cys Leu Gln Tyr
65 70 75 80

Gln Phe Tyr Gln Ile Pro Gly Thr Cys Leu Leu Pro Glu Val Thr Glu
85 90 95

Glu Asp Gln Gly Arg Ile Cys Val Val Ile Asp Leu Asp Glu Thr Leu
100 105 110

Val His Ser Ser Phe Lys Pro Ile Asn Asn Ala Asp Phe Ile Val Pro
115 120 125

Ile Glu Ile Glu Gly Thr Thr His Gln Val Tyr Val Leu Lys Arg Pro
130 135 140

Tyr Val Asp Glu Phe Leu Arg Arg Met Gly Glu Leu Phe Glu Cys Val
145 150 155 160

Leu Phe Thr Ala Ser Leu Ala Lys Tyr Ala Asp Pro Val Thr Asp Leu
165 170 175

Leu Asp Arg Cys Gly Val Phe Arg Ala Arg Leu Phe Arg Glu Ser Cys
180 185 190

Val Phe His Gln Gly Cys Tyr Val Lys Asp Leu Ser Arg Leu Gly Arg
195 200 205

Asp Leu Arg Lys Thr Leu Ile Leu Asp Asn Ser Pro Ala Ser Tyr Ile
210 215 220

Phe His Pro Glu Asn Ala Val Pro Val Gln Ser Trp Phe Asp Asp Met
225 230 235 240

Ala Asp Thr Glu Leu Leu Asn Leu Ile Pro Ile Phe Glu Glu Leu Ser
245 250 255

Gly Ala Glu Asp Val Tyr Thr Ser Leu Gly Ala Ala Ala Gly Pro Leu
260 265 270

Ala Cys Pro Ala Ser Lys Arg Arg Pro Ser Gln
275 280

<210> 5
<211> 798
<212> DNA
<213> Homo sapiens

<400> 5
atggacggcc cggccatcat caccaggtg accaacccca aggaggacga gggccggttg 60
ccgggcgcg ggcagaaagc ctcccagtgc aacgtcagct taaagaagca gaggagccgc 120
agcatcctta gctccttctt ctgtgtcttc cgtgattaca atgtggaggc cctccaccc 180
agcagcccca gtgtgcttcc gccactggtg gaggagaatg gtgggcttca gaagccacca 240
gctaagtacc ttcttccaga ggtgacggtg cttgactatg gaaagaaatg tgtggtcatt 300
gatttagatg aaacattggt gcacagttcg ttttaagccta ttagtaatgc tgattttatt 360
gttccggttg aaatcgatgg aactatacat caggtgtatg tgctgaagcg gccacatgtg 420
gacgagttcc tccagaggat ggggcagctt tttgaatgtg tgctctttac tgccagcttg 480
gccaagtatg cagaccctgt ggctgacctc ctagaccgct ggggtgtgtt ccgggcccg 540
ctcttcagag aatcatgtgt ttttcatcgt gggaactacg tgaaggacct gagtcgcctt 600
gggcgggagc tgagcaaagt gatcattgtt gacaattccc ctgcctcata catcttccat 660
cctgagaatg cagtgcctgt gcagtctctg ttcgatgaca tgacggacac ggagctgctg 720
gacctcatcc ccttctttga gggcctgagc cgggaggacg acgtgtacag catgctgcac 780
agactctgca ataggtag 798

<210> 6

<211> 265
<212> PRT
<213> Homo sapiens

<400> 6

Met Asp Gly Pro Ala Ile Ile Thr Gln Val Thr Asn Pro Lys Glu Asp
1 5 10 15

Glu Gly Arg Leu Pro Gly Ala Gly Glu Lys Ala Ser Gln Cys Asn Val
20 25 30

Ser Leu Lys Lys Gln Arg Ser Arg Ser Ile Leu Ser Ser Phe Phe Cys
35 40 45

Cys Phe Arg Asp Tyr Asn Val Glu Ala Pro Pro Pro Ser Ser Pro Ser
50 55 60

Val Leu Pro Pro Leu Val Glu Glu Asn Gly Gly Leu Gln Lys Pro Pro
65 70 75 80

Ala Lys Tyr Leu Leu Pro Glu Val Thr Val Leu Asp Tyr Gly Lys Lys
85 90 95

Cys Val Val Ile Asp Leu Asp Glu Thr Leu Val His Ser Ser Phe Lys
100 105 110

Pro Ile Ser Asn Ala Asp Phe Ile Val Pro Val Glu Ile Asp Gly Thr
115 120 125

Ile His Gln Val Tyr Val Leu Lys Arg Pro His Val Asp Glu Phe Leu
130 135 140

Gln Arg Met Gly Gln Leu Phe Glu Cys Val Leu Phe Thr Ala Ser Leu
145 150 155 160

Ala Lys Tyr Ala Asp Pro Val Ala Asp Leu Leu Asp Arg Trp Gly Val
165 170 175

Phe Arg Ala Arg Leu Phe Arg Glu Ser Cys Val Phe His Arg Gly Asn
180 185 190

Tyr Val Lys Asp Leu Ser Arg Leu Gly Arg Glu Leu Ser Lys Val Ile
195 200 205

Ile Val Asp Asn Ser Pro Ala Ser Tyr Ile Phe His Pro Glu Asn Ala
 210 215 220

Val Pro Val Gln Ser Trp Phe Asp Asp Met Thr Asp Thr Glu Leu Leu
 225 230 235 240

Asp Leu Ile Pro Phe Phe Glu Gly Leu Ser Arg Glu Asp Asp Val Tyr
 245 250 255

Ser Met Leu His Arg Leu Cys Asn Arg
 260 265

<210> 7
 <211> 642
 <212> DNA
 <213> Homo sapiens

<400> 7
 atgatgggga ggcctgcct gctcacagcg gggcgccct gcttgtggag gagaatggcg 60
 ccacccctaa ggcagacccc agtccaatac ctgctccctg aggccaaggc ccaggactca 120
 gacaagatct gcgtgggtcat cgacctggac gagaccctgg tgcacagctc cttcaagcca 180
 gtgaacaacg cggacttcat catccctgtg gagattgatg ggggtgtcca ccaggtctac 240
 gtgttgaagc gtcttcacgt ggatgagttc ctgcagcgaa tgggcgagct ctttgaatgt 300
 gtgctgttca ctgctagcct cgccaagtac gcagacccag tagctgacct gctggacaaa 360
 tggggggcct tccggggccg gctgtttcga gagtccctgcg tcttccaccg ggggaactac 420
 gtgaaggacc tgagccggtt gggctgagac ctgcggcggg tgctcatcct ggacaattca 480
 cctgcctcct atgtcttcca tccagacaat gctgtaccgg tggcctcgtg gtttgacaac 540
 atgagtgaca cagagctcca cgacctctc cccttcttcg agcaactcag ccgtgtggac 600
 gacgtgtact cagtgtcag gcagccacgg ccaggagact ag 642

<210> 8
 <211> 213
 <212> PRT
 <213> Homo sapiens

<400> 8

Met Met Gly Arg Pro Cys Leu Leu Thr Ala Gly Arg Pro Cys Leu Trp
 1 5 10 15

Arg Arg Met Ala Pro Ser Leu Arg Gln Thr Pro Val Gln Tyr Leu Leu
20 25 30

Pro Glu Ala Lys Ala Gln Asp Ser Asp Lys Ile Cys Val Val Ile Asp
35 40 45

Leu Asp Glu Thr Leu Val His Ser Ser Phe Lys Pro Val Asn Asn Ala
50 55 60

Asp Phe Ile Ile Pro Val Glu Ile Asp Gly Val Val His Gln Val Tyr
65 70 75 80

Val Leu Lys Arg Pro His Val Asp Glu Phe Leu Gln Arg Met Gly Glu
85 90 95

Leu Phe Glu Cys Val Leu Phe Thr Ala Ser Leu Ala Lys Tyr Ala Asp
100 105 110

Pro Val Ala Asp Leu Leu Asp Lys Trp Gly Ala Phe Arg Ala Arg Leu
115 120 125

Phe Arg Glu Ser Cys Val Phe His Arg Gly Asn Tyr Val Lys Asp Leu
130 135 140

Ser Arg Leu Gly Arg Asp Leu Arg Arg Val Leu Ile Leu Asp Asn Ser
145 150 155 160

Pro Ala Ser Tyr Val Phe His Pro Asp Asn Ala Val Pro Val Ala Ser
165 170 175

Trp Phe Asp Asn Met Ser Asp Thr Glu Leu His Asp Leu Leu Pro Phe
180 185 190

Phe Glu Gln Leu Ser Arg Val Asp Asp Val Tyr Ser Val Leu Arg Gln
195 200 205

Pro Arg Pro Gly Ser
210

<210> 9

<211> 783

<212> DNA

<213> Drosophila

<400> 9

atggacagct cggccgtcat tactcagatc agcaaggagg aggctcgggg cccgctgcgg	60
ggcaaagggtg accagaagtc agcagcttcc cagaagcccc gaagccgggg catcctccac	120
tcactcttct gctgtgtctg ccgggatgat ggggaggccc tgctgtctca cagcggggcg	180
ccctgcttg tggaggagaa tggcgccatc cetaagacct cagtccaata cctgctccct	240
gaggccaagg cccaggactc agacaagatc tgcgtggtca tcgarctgaa cgagaccctg	300
gtgcacagct cttcaagcc agtgaacaac gcggacttca tcatccctgt ggagattgat	360
ggggtggtcc accaggtcta cgtgttgaag cgtcctcatg tggatgagtt cctgcagcga	420
atgggcgagc ttttgaatg tgtgtgttc actgctagcc tcgccaagta cgcagacca	480
gtagctgacc tgctggacaa atggggggcc ttccggggcc ggctgtttcg agagtcctgc	540
gtcttccacc gggggaacta cgtgaaggac ctgagccggg tgggtcgaga cctgcggcgg	600
gtgctcatcc tggacaattc acctgcctcc tatgtcttcc atccagacaa tgctgtaccg	660
gtggcctcgt ggtttgacaa catgagtgc acagagctcc acgacctcct ccccttcttc	720
gagcaactca gccgtgtgga cgacgtgtac tcagtgtctc ggcagccacg gccagggagc	780
tag	783

<210> 10
 <211> 260
 <212> PRT
 <213> Drosophila

<400> 10

Met	Asp	Ser	Ser	Ala	Val	Ile	Thr	Gln	Ile	Ser	Lys	Glu	Glu	Ala	Arg
1				5				10						15	

Gly	Pro	Leu	Arg	Gly	Lys	Gly	Asp	Gln	Lys	Ser	Ala	Ala	Ser	Gln	Lys
			20					25					30		

Pro	Arg	Ser	Arg	Gly	Ile	Leu	His	Ser	Leu	Phe	Cys	Cys	Val	Cys	Arg
		35					40					45			

Asp	Asp	Gly	Glu	Ala	Leu	Pro	Ala	His	Ser	Gly	Ala	Pro	Leu	Leu	Val
	50					55					60				

Glu	Glu	Asn	Gly	Ala	Ile	Pro	Lys	Thr	Pro	Val	Gln	Tyr	Leu	Leu	Pro
65					70					75					80

Glu Ala Lys Ala Gln Asp Ser Asp Lys Ile Cys Val Val Ile Glu Leu
85 90 95

Asn Glu Thr Leu Val His Ser Ser Phe Lys Pro Val Asn Asn Ala Asp
100 105 110

Phe Ile Ile Pro Val Glu Ile Asp Gly Val Val His Gln Val Tyr Val
115 120 125

Leu Lys Arg Pro His Val Asp Glu Phe Leu Gln Arg Met Gly Glu Leu
130 135 140

Phe Glu Cys Val Leu Phe Thr Ala Ser Leu Ala Lys Tyr Ala Asp Pro
145 150 155 160

Val Ala Asp Leu Leu Asp Lys Trp Gly Ala Phe Arg Ala Arg Leu Phe
165 170 175

Arg Glu Ser Cys Val Phe His Arg Gly Asn Tyr Val Lys Asp Leu Ser
180 185 190

Arg Leu Gly Arg Asp Leu Arg Arg Val Leu Ile Leu Asp Asn Ser Pro
195 200 205

Ala Ser Tyr Val Phe His Pro Asp Asn Ala Val Pro Val Ala Ser Trp
210 215 220

Phe Asp Asn Met Ser Asp Thr Glu Leu His Asp Leu Leu Pro Phe Phe
225 230 235 240

Glu Gln Leu Ser Arg Val Asp Asp Val Tyr Ser Val Leu Arg Gln Pro
245 250 255

Arg Pro Gly Ser
260

<210> 11

<211> 642

<212> DNA

<213> Drosophila

<400> 11

atgatgggga ggcctgcct gctcacagcg gggcgcccct gcttgtggag gagaatggcg 60

ccatccctaa ggcagacccc agtccaatac ctgctccctg aggccaaggc ccaggactca 120

gacaagatct gcgaggcat cgarctgaac gagaccctgg tgcacagctc cttcaagcca	180
gtgaacaacg cggacttcat catccctgtg gagattgatg gggaggcca ccaggtctac	240
gtgttgaagc gtctcacgt ggatgagttc ctgcagcgaa tgggcgagct ctttgaatgt	300
gtgctgttca ctgctagcct cgccaagtac gcagaccag tag	